IN THE CLAIMS

1. **(currently amended)** A data transmission device for generating a plurality of compressed/encoded data of different bit rates from a single video signal and simultaneously transmitting the compressed/encoded data onto a network, comprising:

a synchronizing signal detection section for detecting a vertical synchronizing signal and a color synchronizing signal from the video signal input thereto, wherein the video signal comprises an NTSC composite signal;

a plurality of compressing/encoding sections for compressing/encoding the video signal to generate data streams of different bit rates, respectively, wherein the compressing/encoding sections generate data streams having the same sequence of picture types;

a timing control section for controlling said compressing/encoding sections in accordance with the detected synchronizing signal such that timings for starting compression/encoding processes in said compressing/encoding sections are shifted from one another in units of frame; and

a multiplexing section for sequentially multiplexing the data streams generated respectively by said compressing/encoding sections and transmitting the multiplexed data onto the network,

wherein the timing control section causes one of said compressing/encoding sections to start the compression/encoding process when frame start timing of the video signal derived based on the vertical synchronizing signal coincides with rise timing of a chrominance subcarrier signal synchronized with the color synchronizing signal, and causes a different one of said compressing/encoding sections to start the compression/encoding process when the frame start timing coincides thereafter with fall timing of the chrominance subcarrier signal.

2. – 3. **(canceled)**

4. (original) The data transmission device according to claim 1, wherein said multiplexing section generates fragmented packets carrying the individual data streams in accordance with amounts of data generated per unit time by said compressing/encoding sections, respectively, and transmits the fragmented packets at equal intervals within the unit time.

5. (original) The data transmission device according to claim 4, wherein said multiplexing section sets a reference amount of data to be carried by one packet, and if an amount of data generated by any one of said compressing/encoding sections during a data generation period corresponding to one frame exceeds n times (n is an integer greater than zero) the reference amount, said multiplexing section fragments and carries the generated data into (n + 1) fragmented packets each having a data amount equal to or smaller than the reference amount and sequentially transmits the fragmented packets at equal intervals obtained by equally dividing the data generation period by the number of the fragmented packets.

6. (original) The data transmission device according to claim 5, wherein said reference amount can be set to a desired value.

7. **(currently amended)** A data transmission method for generating a plurality of data streams of different bit rates by compressing/encoding a single video signal such that data streams generated by compression/encoding have the same sequences of picture types, and for simultaneously transmitting the data streams onto a network, comprising the steps of:

detecting a vertical synchronizing signal and a color synchronizing signal from the input video signal, wherein the video signal comprises an NTSC composite signal;

shifting start timings for compression/encoding processes corresponding to the generation of the respective data streams from one another in units of frame in accordance with the detected synchronizing signal, wherein one of said compressing/encoding processes is started when frame start timing of the video signal derived based on the vertical synchronizing signal coincides with rise timing of a chrominance subcarrier signal synchronized with the color synchronizing signal, and a different one of said compressing/encoding processes is started when the frame start timing coincides thereafter with fall timing of the chrominance subcarrier signal; and

generating fragmented packets carrying the individual data streams in accordance with amounts of data generated per unit time by the respective compression/encoding processes, and transmitting the fragmented packets onto the network at equal intervals within the unit time.